days; here the mortality was 7.3 per cent.—excluding cases as above, 4.8 per cent. The mortality of cases injected on or after the fourth day was 27 per cent. Of the laryngeal cases (membranous croup) one-half recovered without operation; in a large proportion of cases the symptoms of stenosis were severe. Of the cases upon which intubation was performed the mortality was 25.9 per cent., or less than one-half as great as has ever been reported under any other method of treatment. Broncho-pneumonia occurred in 5.9 per cent. In contrast to the two or three instances in which the serum is believed to have acted unfavorably upon the heart may be cited a large number in which there was distinct improvement in its action after the serum was injected. There is little if any evidence to show that nephritis was caused in any case by the injection of serum. The effect upon the nervous system is less marked than upon any other part of the body, paralytic *sequelæ* being recorded in 9.7 per cent. of the cases. The most concentrated strength of an absolutely reliable preparation should be administered as early as possible on a clinical diagnosis, not waiting for a bacteriological culture. However late the first observation is made, an injection should be given unless the progress of the case is favorable and satisfactory. The dosage for a child over two years old should be, in all laryngeal cases with stenosis and in all other severe cases, 1500 to 2000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there is no improvement. A third dose after a similar interval may be necessary. For severe cases in children under two years, and for mild cases over that age, the initial dose should be 1000 units, to be repeated as above if necessary; a second dose is not usually required. The dosage should be always estimated in antitoxin units and not in the amount of serum.—*Pædiatrics*, 1896, No. 1, Supplement.

SUDDEN DEATH AFTER A PREVENTIVE INJECTION OF BEHRING'S ANTITOXIN.

DR. R. PALTAUF, noting the previously reported cases of Maizard, Quinon, and Alföldi, claims that these were not definite in that thorough examinations were not made. It is admitted that local and general erythemata, exanthemata, even marked fever, may arise, and occasionally joint-symptoms, but denies that a fatal case has resulted or that permanent injury has been done. The beneficial influence of the serum upon diphtheria is incontestable, and the assumption that death is due to its action only prevents its use through the anxiety, of the laity, to which these reports give rise. Instances of sudden death in children are not uncommon, and may be attributed to causes not found save after especial examination. Among these may be cited acute interstitial myocarditis, the lymphatic-chlorotic constitution of rhachitis.—*Wiener klinische Wochenschrift*, 1896, No. 16, S. 297.

THE TREATMENT OF SCARLET FEVER.

M. E. APERT reports that two attempts in severe cases with the serum of Marmorek (*cf.* THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, 1896, No. 290, p. 745) were not encouraging. The ordinary treatment is a milk-diet, fifteen to thirty grains of ammonium acetate daily during the period of eruption, buccal irrigations of aromatic boiled water, and an injection into the nasal cavities of 2 per cent. of menthol in oil.

M. Comby states that the mortality of this disease treated by injections of Marmorek's serum was 8 per cent., while in the same pavilion the previous mortality was 5 per cent. Not only did the antistreptococcic serum fail to lower the mortality, but it did not prevent the complications due to the streptococcus. One can say that its value is *nil* in the treatment of this disease.—*Journal des Praticens*, 1896, No. 20, p. 317.

DEATH FOLLOWING ANTIDIPHTHERITIC SERUM.

M. Variat reports a single observation. A child of eighteen months suffered from a slight pharyngeal diphtheria, followed by croup. After intubation five drachms of serum were administered. Death resulted in forty-eight hours; the temperature was 105° F. On necropsy nothing was found to indicate the cause of death. The pharnyx and larynx were entirely free from membrane and appeared healthy.—*La Semaine Médicale*, 1896, No. 22, p. 173.

THE CAUSE OF SUDDEN DEATH FROM ANTITOXIN INJECTIONS.

Drs. A. Seibert and F. Schwyzer, from laboratory-experiments, conclude that: (1) Antitoxic serum does not seem to be capable of causing threatening symptoms and speedy death even when brought quickly into the blood-current in very large doses. 2. The carbolic acid used as preservative must be in such a weak solution as to be unable to cause the characteristic carbolic convulsions. 3. Even very small quantities of air will cause severe disturbances and ultimate cessation of breathing, and to this cause the authors attribute the sudden deaths reported.—*New York Medical Record*, 1896, No. 913, p. 708.

TREATMENT OF SNAKE-BITE WITH ANTIVENENE.

Dr. Fraser cannot as yet adduce any actual experience of its use in human beings, although a considerable quantity in both the liquid and dry state has been sent to India and Africa. Other remedies, however, should be used which may assist the action of this antidote in preventing death and also by prolonging life increase the opportunity for a more thorough use of it; such would be medicines which increase secretion—diaphoretics and diuretics—rapidly acting stimulants of the circulation, alcohol and the old snake-remedy, ammonia; stimulants of the respiration, atropine and strychnine; the latter of which has received attention. Certain auxiliary measures, as the application of a ligature, removal of the venom by opening up wounds, and suction, are useful. The dose varies with the amount of venom, conditions of administration of the remedy, and time which has elapsed since the bite. The symptoms do not give information as to the quantity of venom received. Probably eleven and one-half ounces would be required surely to antidote the poison if injected not much longer than thirty minutes after the bite had been inflicted; possibly four ounces may be sufficient. The bulk, however, may be reduced one-half by dissolving the dried antivenene. Even with